

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2005/022731

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl. G03G21/00 (2006.01), G03G15/16 (2006.01), G03G21/10 (2006.01)

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl. G03G21/00 (2006.01), G03G15/16 (2006.01), G03G21/10 (2006.01)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Published examined utility model applications of Japan 1922-1996
 Published unexamined utility model applications of Japan 1971-2006
 Registered utility model specifications of Japan 1996-2006
 Published registered utility model applications of Japan 1994-2006

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 2001-305907 A (RICOH COMPANY,LIMITED) 2001.11.02, paragraphs 0022-0044, fig.1-fig.5(with no patent family members)	39-44, 46, 48, 51-56, 58, 60
Y		1-29, 32, 33, 4 5, 47, 49, 50, 5 7, 59, 61-66
Y	JP 2000-242135 A (RICOH COMPANY,LIMITED) 2000.09.08, paragraph 0027, fig.2 (with no patent family members)	1-14
Y	JP 2003-43885 A (FUJI XEROX CO.,LTD) 2003.02.14, fig.4(with no patent family members)	6

☒ Further documents are listed in the continuation of Box C.
 ☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance
 "E" earlier application or patent but published on or after the international filing date
 "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
 "O" document referring to an oral disclosure, use, exhibition or other means
 "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

10.03.2006

Date of mailing of the international search report

20.03.2006

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 11-65391 A (RICOH COMPANY,LIMITED) 1999.03.05, fig3,fig4(with no patent family members)	7
Y	JP 2004-309940 A (RICOH COMPANY,LIMITED) 2004.11.04, claim 4,paragraph 0019 & US 2004/0202495 A1	8, 57, 61
Y	JP 7-5794 A (FUJI XEROX CO.,LTD) 1995.01.10, claim 1, paragraphs 0008-0011(with no patent family members)	9
X	JP 2004-334092 A (RICOH COMPANY,LIMITED) 2004.11.25, claims 17-25, paragraphs 0028-0062 & US 2005/0002705 A	67-71
Y		10-13, 17-21, 25-29, 34-38, 57, 62-66
Y	JP 11-65311 A (RICOH COMPANY,LIMITED) 1999.03.05, claim 3, paragraphs 0022-0026(with no patent family members)	15-21
Y	JP 2002-55580 A (CANON KABUSHIKI KAISHA) 2002.02.20, paragraphs 0012-0019, 0028-0082(with no patent family members)	15-29
Y	JP 6-342236 A (RICOH COMPANY,LIMITED) 1994.12.13, paragraph 0008(with no patent family members)	24
Y	JP 2002-341578 A (RICOH COMPANY,LIMITED) 2002.11.27, paragraph 0066 & US 2003/0049555 A1	24
Y	JP 2002-244485 A (CANON KABUSHIKI KAISHA) 2002.08.30, fig.10,fig.12(with no patent family members)	30-38
Y	JP 2004-86234 A (KONICA MINOLTA HOLDINGS,INC.) 2004.03.18, claim 1,paragraph 0014(with no patent family members)	30-38

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 2003-91143 A (RICOH COMPANY,LIMITED) 2003.03.28, paragraphs 0100,0101(with no patent family members)	45
Y	JP 2001-100491 A (RICOH COMPANY,LIMITED) 2001.04.13, claim 6, paragraphs 0034-0038(with no patent family members)	45
Y	JP 5-35155 A (CANON KABUSHIKI KAISHA) 1993.02.12, paragraphs 0019-0021,fig.3(with no patent family members)	45
Y	JP 2000-206722 A (RICOH COMPANY,LIMITED) 2000.07.28, paragraph 0012, fig.3(with no patent family members)	45
Y	JP 2003-43888 A (CANON KASEI KABUSHIKI KAISHA) 2003.02.14,claims 1-8, paragraphs 0026-0042, fig.1(with no patent family members)	47
Y	JP 9-319274 A (RICOH COMPANY,LIMITED) 1997.12.12, claim 3, paragraphs 0039, 0040(with no patent family members)	49
Y	JP 2002-6679 A (RICOH COMPANY,LIMITED) 2002.01.11, claims 1-4, paragraphs 0031-0041,fig.3,fig.4(with no patent family members)	50, 57
Y	JP 2000-352832 A (RICOH COMPANY,LIMITED) 2000.12.19, paragraph 0026 & US 006562529 B1 & US 2003/0165757 A1	59